# THE MINERAL INDUSTRIES OF LESOTHO AND SWAZILAND

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# **LESOTHO**

The Kingdom of Lesotho is a landlocked, independent, parliamentary, constitutional monarchy surrounded by South Africa. The economy was based on subsistence agriculture, livestock, and remittances from miners employed in South Africa. The country has long been known as a source of diamond, mostly from alluvial deposits. Mineral production, however, was not a significant part of the economy, and contributed only about 0.1% of the gross domestic product (GDP) during the fiscal year that ended on April 30, 2003 (International Monetary Fund, 2004§¹). Artisanal miners produced a small amount of clay, crushed stone, and sand and gravel for domestic consumption. Artisanal diamond production in 2002-03 was 2,100 carats valued at approximately \$96,500.² The nation supported a population of 1.8 million people in a 30,350-square-kilometer (km²) area. The country's GDP was estimated to be \$5.1 billion, based on purchasing power parity in 2002, and grew at a rate of 4%; the GDP per capita was \$2,700 (U.S. Central Intelligence Agency, 2003§). HIV/AIDS remained a major social and economic problem for Lesotho; the United Nations reported a 31% HIV/AIDS infection rate among the adult population between 15 and 49 years of age at yearend 2001 (Joint United Nations Programme on HIV/AIDS, 2002§).

Repatriated wages from Basotho miners who worked in the South African gold mines have historically contributed significantly to national income. The number of migrant Basotho miners who work in South African mines increased to 62,000 in 2003 from 61,400 in 2002. Worker remittances back to Lesotho represented about 61% of the workers' total earnings. Between 2001 and 2002, miners' remittances increased to \$198.3 million from \$123 million (International Monetary Fund, 2004§).

Commercial interest in the mineral resources of Lesotho was limited to diamond. The Lesotho Geological Survey identified 33 kimberlite pipes and 140 dikes, of which 24 are diamondiferous. MineGem Inc. of Canada held a controlling interest in two locally incorporated companies involved with diamond exploration and development within the Liqhobong kimberlite area—Liqhobong Mining Development Company (Pty.) Ltd. (LMDC) [MineGem (65%), Industrial Development Corporation (IDC) of South Africa (22.5%), and the Government (12.5%)]; and Maluti Diamonds Pty. Ltd. (MineGem, 90%). In May 2002, MineGem entered into a term agreement with Florence Worldwide Finance Limited to establish a financial structure for the estimated \$6.7 million project to develop the Satellite Pipe; the agreement, however, expired in January 2003 when project financing was not obtained by that date. The Satellite Pipe Mine feasibility study had projected a production rate of 290,000 carats per year on the basis of an indicated resource of 1.4 million metric tons (Mt) with an average recoverable grade of 69 carats per 100 metric tons (t), an average value of \$41.24 per carat, and a mining rate of 420,000 metric tons per year (t/yr). A 7-month construction period was anticipated (MineGem Inc., 2002§).

In November 2003, European Diamonds PLC purchased MineGem for approximately \$6 million. European Diamonds was listed on the London Alternative Investment Market but operated out of Finland and worked in close association with the Geological Survey of Finland (MineGem Inc., 2003b§). The Liqhobong properties are located in the northern highlands about 120 kilometers east-northeast of the capital of Maseru. LMDC held a June 2001 mining lease that gave it the right to mine the Satellite Pipe. Under LMDC's Mining Lease, the company was required to begin production at the Satellite Pipe by March 2003. On January 28, 2003, the Ministry of Natural Resources granted LMDC an extension until July 2003; it then granted LMDC another extension to December 31, 2003, at which point the mining lease was scheduled to expire unless construction financing was obtained or a further extension was granted. Maluti Diamonds held a 3-year prospecting license to explore and conduct a feasibility study on the Main Pipe at Liqhobong. To maintain its prospecting license on the Main Pipe deposit, Maluti Diamonds was required to spend a minimum of \$3 million and complete a feasibility study for establishment of a mine on the Main Pipe deposit by June 12, 2004 (MineGem Inc., 2003a§; b§).

Letseng Diamonds (Pty) Ltd., which was a joint venture between the Government of Lesotho and JCI Limited of South Africa, began construction on the Letseng-la Terae open pit diamond mine and plant in February 2003; the mine is located in the Maluti Mountains in northeastern Lesotho. The facilities were expected to be commissioned by the first quarter of 2004 and to be fully operational by mid-year 2004. Pit optimization studies increased the inferred reserves to 34.2 Mt from 12 Mt down to a depth of 390 meters at a waste-to-ore stripping ratio of 2.37 to 1. The property included the Main Pipe, which consisted of six different kimberlites, and the Satellite Pipe. Diamond in excess of 100 carats per stone were found at the mine during mining by De Beers Consolidated Mines Ltd. from 1977 to 1982 when less than 20% of the open pit minable ore was treated (JCI Limited, undated§).

Future prospects for mineral development in Lesotho appeared to be limited to a revival of the diamond sector, which, however, could be a significant contributor to the economy.

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<sup>&</sup>lt;sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

<sup>&</sup>lt;sup>2</sup>Where necessary, values have been converted from Lesotho maloti (M) to U.S. dollars at the rate of M11.4=US\$1.00 for the fiscal year 2001-02, and M7.9=US\$1.00 for the fiscal year 2002-03.

### **Internet References Cited**

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## **SWAZILAND**

The Kingdom of Swaziland, which is a landlocked country surrounded by South Africa on three sides and by Mozambique to the east, has a surface area of 17,360 km<sup>2</sup> and, in 2003, supported a population of about 1.2 million people. Mining has been an important part of the history of Swaziland, but a small and declining factor in its present economy. Formal mining has been phasing out since 1980—mining of asbestos ceased in 2000; diamond, in 1996; and iron ore, in 1980. The Maloma coal mine was the only active mine in 2003. Small-scale gold mining took place in the past within Swaziland's portion of the Barberton greenstone belt, but the country had no reported production of gold in 2003. Swaziland also produced brick clay for a brick mill near Matsapha intermittently.

The country's GDP in 2002 was estimated to be \$5.44 billion based on purchasing power parity; this represented a growth rate of 1.6%. The GDP per capita was \$4,800 (U.S. Central Intelligence Agency, 2003§). The Swazi economy was dominated largely by export-oriented agricultural and related value-added manufacturing production, which were vulnerable to climatic and external demand factors. Mining's contribution to the GDP, based on current 2001 prices, declined to 0.03% by 2001 compared with 0.9% in 1998. Merchandise exports in 2001 (the latest year for which data were available) included 3,000 t of asbestos valued at \$582,000 and 313,000 t of coal valued at \$5.63 million. Asbestos and coal exports represented less than 1% of all merchandise exports in 2001. Imports of fuels, lubricants, and minerals were valued at \$33 million, which was equal to about 4% of all imports (Central Bank of Swaziland, 2002§, International Monetary Fund, 2003§). During 2003, the Maloma Mine, which was the country's only operating coal mine, was purchased by Xstrata plc of the United Kingdom. Maloma produced approximately 300,000 t/yr of anthracite coal, all of which was exported to South Africa.

Foreign investment in mining remained regulated by the Investment Promotion Bill of 1997. In October 2000, the Government announced new tax incentives to attract new foreign investment. The new provisions included a 10-year cut in the corporate tax to 10% from 37.5% for eligible development companies and a 10-year exemption from the withholding tax on dividends. In an overview of minerals policy and legislation in Swaziland, Mbendi Information Services Pty. Ltd. (2000§) described the following: "There is a fundamental distinction in the constitutional law of Swaziland between the State and its Government on the one hand and on the other the 'Swazi Nation' and the King (the Ngwenyama). By constitution, minerals are vested in the Ngwenyama in trust for the Swazi Nation. The Ngwenyama grants mineral rights after consultation with a minerals committee. This committee is appointed by the Ngwenyama on the advice of his advisors in accordance with the Swazi law and custom. The conditions and terms of mineral rights issued are negotiated and approved by the Ngwenyama."

The mineral sector's role in the economy of Swaziland is declining. The main hope for revival of this sector rests with the ability of the Government to attract foreign investment to expand coal production at Maloma and at the closed Mpaka Mine where identified coal resources could support additional production. As an energy source in the region, Swazi coal is faced with competition from excess coal capacity in South Africa and the development of low-cost natural gas resources in Mozambique.

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# **Major Sources of Information**

Ministry of Natural Resources P.O. Box 772 Maseru, Lesotho Telephone: (266) 322-491 Department of Mines and Geology

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Fax: (268) 404-2436 E-mail: mnre@realnet.co.sz

Internet: http://www.gov.sz/home.asp?pid=63 Geological Survey and Mines Department Corner of Mdada & Johnston Streets

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 ${\bf TABLE~1} \\ {\bf LESOTHO~AND~SWAZILAND:~PRODUCTION~OF~MINERAL~COMMODITIES}^1 \\$ 

Country and commodi	ty	1999	2000	2001	2002	2003
LESOTHO <sup>2</sup>						
Fire clay	cubic meters	35,000 e	35,000 e	34,000	42,000	14,470
Diamond	carats	1,500 e	1,500 e	1,140	721	2,099
Stone, quarry products:						
Dimension stone	square meters	12,000	12,000	13,357	29,766	1,089
Gravel and crushed rock	cubic meters	180,000	180,000	180,000	261,037	389,695
SWAZILAND <sup>3, 4</sup>						
Asbestos, chrysotile fiber	metric tons	22,912	12,690			
Coal, anthracite	do.	426,299	178,043	78,043	313,272	300,000
Stone, quarry products	thousand cubic meters	250	304	300	300 e	300 e

<sup>&</sup>lt;sup>e</sup>Estimated; estimated data are rounded to no more than three significant digits. -- Zero.

<sup>&</sup>lt;sup>1</sup>Includes data available through September 2004.

<sup>&</sup>lt;sup>2</sup>Reported data from Lesotho Department of Mines and Geology for financial year ending in April of year shown.

<sup>&</sup>lt;sup>3</sup>Reported data from Swaziland Geological Survey and Mines Department or Central Bank. Includes fiscal year data available through August 2004.

<sup>&</sup>lt;sup>4</sup>In addition to the commodities listed, modest quantities of crude construction materials (brick clay, sand and gravel), kaolin, pyrophyllite (talc), sandstone, and soapstone are produced, but output is not reported quantitatively, and information is inadequate to make reliable estimates of output levels.